

May 20, 2010

Rear Admiral Mary Landry
Commander, Eighth Coast Guard District
Hale Boggs Federal Building
500 Poydras Street
New Orleans, LA 70130

Samuel Coleman, P.E.
Director, Superfund Division
U.S. EPA Region 6
Dallas, TX 75202

Re: May 19, 2010 Addendum 2 to Dispersant Monitoring and Assessment
Directive ("Addendum 2")

Dear Admiral Landry and Mr. Coleman:

This letter is the response to the directive in Addendum 2 for BP Exploration & Production Inc. ("BP") to identify within 24 hours of issuance of Addendum 2 one or more approved dispersant products from the National Contingency Plan Product Schedule that are "available in sufficient quantities, are as effective at dispersing the oil plume, and have a toxicity value less than or equal to 23.00 ppm LC50 toxicity value for Menidia or 18.00 ppm LC50 for Mysidopsis, as indicated on the NCP Product Schedule".

BP's response below considers the criteria set forth in the directive in the following order (1) dispersants with a toxicity value greater than or equal to 32.00 ppm LC50 toxicity value for Menidia or 18.00 ppm LC50 for Mysidopsis, as indicated on the NCP Product Schedule, (2) the availability based on existing stockpiles, the estimated time to begin aerial and subsurface application, and time for manufacturing, shipping and warehousing, and (3) as effective as Corexit EC9500A at dispersing the oil plume. As discussed below, given the above criteria, BP continues to believe that Corexit EC9500A is the best alternative.

(1) Toxicity Value.

Only five products on the NCP Product Schedule meet the criteria in the May 19th directive. These are: Sea Brat #4, Nokomis 3-F4 and Nokomis 3-AA, Mare Clean 200, and Neos AB3000.

EPA has used acute toxicity criteria to evaluate dispersants that will be applied to oil floating on the water surface. When evaluating the same materials for subsea use, additional criteria may be relevant. We have attached a summary of the criteria that BP is using to evaluate dispersant options, and comparison tables that evaluate each dispersant by such criteria, based on information currently available to us.

One relevant criterion, given the amount of dispersant that is required at this site and the proposed application near the ocean floor, is the potential long term effect and persistence of the chemicals in each dispersant.

In this regard, Sea Brat #4 contains a small amount of a chemical that may degrade to a nonylphenol (NP). The class of NP chemicals have been identified by various government agencies as potential endocrine disruptors, and as chemicals that may persist in the environment for a period of years. The manufacturer has not had the opportunity to evaluate this product for those potential effects, and BP has not had the opportunity to conduct independent tests to evaluate this issue either. BP learned of this issue after it applied for permission to use Sea Brat #4 at the incident site.

With this additional information in hand, we believe it would be prudent to evaluate the potential NP issue more carefully before EPA or the FOSC require Sea Brat to be used at the incident site, and in particular, before it is applied underwater near the ocean floor.

It would also be prudent to obtain the chemical formulas for the other dispersants that meet the acute toxicity criteria in the May 19th directive, and evaluate them for their potential to degrade to NP, or any other chemical that has been identified as a potential endocrine disruptor. BP has not been able to obtain this information in the 24 hour time frame provided in the directive.

COREXIT does not contain chemicals that degrade to NP. The manufacturer indicates that COREXIT reaches its maximum biodegradability within 28 days of application, and that it does not persist in the environment. These qualities make COREXIT a better choice for subsea application, based on the information currently available. COREXIT appears to have fewer long term effects than the other dispersants evaluated.

(2) Availability.

BP has an inventory of 246,380 gallons of COREXIT that are available for immediate use, and the manufacturer is able to produce an additional 68,000 gallons/day, which is sufficient to meet all anticipated dispersant needs at this site.

BP also has an inventory of 100,000 gallons of Sea Brat #4 available for immediate use. The manufacturer is able to produce an additional 50,000 gallons/day, which would be sufficient to meet all anticipated surface application needs, but may not be sufficient to meet both surface and subsurface application needs combined.

BP does not have a stockpile of the other dispersants that meet the criteria in the May 19th Directive, and the manufacturers tell us that they cannot produce the requested volume for 10 to 14 days or more.

Attached to this letter is a table that describes the availability and production capability for each dispersant option (See "Dispersant Supply Profile.")

(3) Effectiveness.

COREXIT was 55% to 63% effective in dispersing samples of South Louisiana Crude Oil. Sea Brat #4 was 61% effective in dispersing samples of the same material. The products are expected to have similar levels of effectiveness in the field.

Attached to this letter is a table that shows the expected effectiveness ratings for the four other dispersants that meet the acute toxicity criteria in Addendum 2. The Nokomis products are slightly more effective (64-65%), while Mare Clean and Neos AB3000 are reported to be substantially more effective at dispersing oil (84% and 90%).

(4) Conclusion.

In the midst of an oil spill response, one of the most important criteria is whether the dispersant in question can be obtained in sufficient volumes to meet immediate needs. Dispersants must be applied to the spill shortly after release to be effective. As oil weathers in the environment, it becomes increasingly difficult to disperse with any of the listed products.

COREXIT was the only dispersant that was available immediately, in sufficiently large quantities, to be useful at the time of the spill. Subsequent efforts have identified Sea Brat #4 as a possible alternative that is equally effective at dispersing oil, but has fewer acute toxicity effects. In the short

time provided to us, BP and the manufacturer of Sea Brat #4 have not had the opportunity to evaluate other potentially significant criteria, including the risk that a small fraction of Sea Brat #4 may degrade to NP, and/or may persist in the environment.

None of the other dispersants that meet the acute toxicity and effectiveness criteria in Addendum 2 are available in sufficient quantities at this time. In addition, before supporting a decision to switch to those dispersants, it would be important to review the formula for each alternative, and evaluate it for additional risks, such as persistence in the environment. BP has not been able to do this in the time provided.

Based on the information that is available today, BP continues to believe that COREXIT was the best and most appropriate choice at the time when the incident occurred, and that COREXIT remains the best option for subsea application.

Before the Coast Guard and EPA issue further directives requiring a change in dispersant products or monitoring, we would appreciate the opportunity to meet with you to discuss the options and their efficacy and potential impacts, in view of the circumstances at the spill site, and the proposed methods of usage.

After you have the opportunity to review the attached information, please let me know the earliest time when you might be available to meet with our team to discuss these issues.

Sincerely,

Douglas J. Suttles